CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



NOTICE OF PROPOSED AWARD (NOPA)

Driving the Integration of Electric Vehicles to Maximize Benefits to the Grid PON-14-310 <u>Amended October 1, 2015</u>

On December 18, 2014, the California Energy Commission (Energy Commission) released a competitive solicitation to fund advance technologies and strategies for smart and efficient charging, and vehicle-to-grid communication interfaces. Through this solicitation, \$4,000,000 in Electric Program Investment Charge (EPIC) funding was available to fund applications in:

- Group 1: Smart and efficient charging for integrating plug-in electric vehicles into the power grid
- Group 2: Grid communication interfaces for plug-in electric vehicle charging to support vehicle-to-grid services

The Energy Commission received Twenty five (25) proposals by the due date of February 6, 2015. Each proposal was screened, reviewed, evaluated and scored using the criteria in the solicitation. Twenty five proposals passed the Stage One Application Screening.

The attached <u>amended</u> "Notice of Proposed Awards" identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount and score. The Energy Commission augmented the funding total with an additional \$499,976 \$2,681,645. The total amount recommended is \$4,499,976 \$6,681,669.

Funding of proposed projects resulting from this solicitation is contingent upon the approval of these projects at a publicly noticed Energy Commission Business Meeting and execution of a grant agreement. If the Energy Commission is unable to timely negotiate and execute a funding agreement with an Applicant, the Energy Commission, at its sole discretion, reserves the right to cancel or otherwise modify the pending award, and award the funds to another applicant.

In addition, the Energy Commission reserves the right to: 1) add to, remove, or shift funding between the different groups if there are insufficient passing proposals in one group and 2) negotiate with successful applicants to modify the project scope, schedule, and/or level of funding.

This notice is being mailed to all parties who submitted an application to this solicitation and is also posted on the Energy Commission's website at: www.energy.ca.gov/contracts/.

For information, please contact Janna Franks, (916) 654-4921, janna.franks@energy.ca.gov.

Janna Franks Commission Agreement Officer



PON-14-310

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Amended Notice of Proposed Awards

Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Proposed .	Awards						
1	ChargePoint, Inc.	Next-Generation Grid Communication for Residential PEVs	\$1,500,000	\$1,500,000	\$142,500	87.0	Awardee
2	Center for Sustainable Energy	ISO/IEC 15118 Demand Clearing House to Enable Standardized Vehicle-Grid Integration	\$1,499,999	\$1,499,999	\$100,000	86.1	Awardee
3	Electric Power Research Institute (EPRI)	Distribution System Aware Vehicle to Grid Services for Improved Grid Stability and Reliability	\$1,499,977	\$1,499,977	\$795,754	85.2	Awardee
<u>4</u>	The Regents of the University of California, Berkeley	An Open Source, Open- Architecture Software Platform For Plug-in Electric Vehicle Smart	\$1,500,000	\$1,500,000	<u>\$90,000</u>	<u>83.2</u>	Finalist <u>Awardee</u>
<u>5</u>	Andromeda Power, LLC	-InCISIVE- grid Communication Interface for Smart Electric Vehicle Services	<u>\$681,693</u>	<u>\$681,693</u>	<u>\$465,000</u>	<u>82.6</u>	Finalist <u>Awardee</u>
Total F	unding Recommended		\$4,499,976 <u>\$6,681,669</u>		\$1,038,254 \$1,593,254		



PON-14-310

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Amended Notice of Proposed Awards

Passed by	ut Not Funded						
6	NRG Energy, Inc.	EV Storage Integration: Proving Communication and Interconnection Standards for Bidirectional Electric Vehicles	\$1,498,275	\$0	\$672,952	82.5	Finalist
7	MOEV, Inc.	Role and Technology for Integrating Aggregators within Smart Charging Electric Vehicle Networks for Utility Requirements and Markets	\$509,442	\$0	\$95,000	80.2	Finalist
8	Lawrence Berkeley National Laboratory	VGIsoft: A Simulation Platform for Quantitatively Understanding Vehicle-grid Integration	\$1,500,000	\$0	\$50,000	79.8	Finalist



PON-14-310

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Amended Notice of Proposed Awards

9	Andromeda Power, LLC	SPECS-Smart Photovoltaic Grid-integrated Electric Vehicle Bidirectional Charging Station	\$503,537	\$0	\$387,640	79.5	Finalist
10	CALSTART, Inc.	The Siemens Advanced Smart EV Charging Applied R&D Project	\$1,470,737	\$0	\$65,166	79.1	Finalist
11	Electric Power Research Institute (EPRI)	A Novel Approach to Multiple Charge Station Installations for AC Level 2 Charging Using a Miniaturized Charge Station Incorporating Networking and Remote Control Capabilities	\$744,189	\$0	\$631,211	78.3	Finalist
12	Cleantech Institute, Inc.	Development and Demonstration of a Smart Vehicle-to-Grid Integration System	\$1,500,000	\$0		76.6	Finalist
13	The Regents of the University of California, Los Angeles	Unified Communications for Bi-directional Control and Power Flow to Enhance Grid Services via Smart Energy Management in EVs	\$999,999	\$0	\$135,000	76.5	Finalist



PON-14-310

Driving the Integration of Electric Vehicles to Maximize Benefits to the Grid

Amended Notice of Proposed Awards

		Demonstrations and					
		Demonstrations and					
	The Regents of the	Evaluation of a Plug-in Electric Vehicle Smart					
	University of California,	Charging Algorithm at					
14	Irvine	Different Grid Scales	\$854,539	\$0	\$367,153	76.3	Finalist
			+ ,	* -	+ /		
	Humboldt State University	Advanced Smart Charging at					
	Sponsored Programs	Home and the Workplace					
15	Foundation	with Marin Clean Energy	\$1,166,725	\$0	\$162,999	75.7	Finalist
		Real-Time Pricing and					
		Control Application for Smart					
16	Gridscape Solutions	EV Public Charging	\$858,532	\$0	\$126,798	74.5	Finalist
	Green Dot Transportation,	Smart, Efficient, Seamless					
17	Inc.	Platform for VGI	\$1,392,581	\$0	\$37,000	74.4	Finalist
		Smart 4-Quadrant					
	The Regents of the	Residential Electric Vehicle					
	University of California,	Supply Equipment to Benefit					
18	Irvine	Both Utilities and Customers	\$1,499,627	\$0			
19	University of San Diego	Electric Toreros	\$1,498,911	\$0	\$97,345	72.9	Finalist
		Residential EV Charging					
	Lite to a mark to a fine of Coalifernation	Stations with Optimal, Active					
00	University of California,	Control of Charging	Ф 7 00 000	Φ0	Φ0	70.0	E'm a l'a t
20	Davis	Scheduling and Power	\$799,988		т -	72.0	Finalist
Tatal			\$18,978,775		\$3,731,416 \$3,476,446		
Total			<u>\$16,797,082</u>	\$0	<u>\$3,176,416</u>		



PON-14-310

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Did Not Pa	Did Not Pass							
21	Broadband Telcom Power,	Development and Deployment of Advanced Vehicle Grid Interface Gateway (VGIG) Powered High Power DC Fast Charger	\$1,341,135	\$0	\$678,832	N/A	Did Not Pass	
22	OpConnect, LLC	Smart Charging with Real Time Pricing	\$600,667	\$0	\$77,543	N/A	Did Not Pass	
23	Motiv Power Systems, Inc.	Cost-Effective Vehicle-to- Grid Bus Development	\$1,500,000	\$0	\$145,228	N/A	Did Not Pass	
24	San Diego State University Research Foundation	Bi-Directional Smart and Efficient AC and Fast DC Charging for Integrating Plug- In Electric Vehicles In a Microgrid System Based on Renewable Power Generation Units	\$1,078,275	\$0	\$842,203	N/A	Did Not Pass	
25	PowerHydrant, LLC	PON 14-310. Driving the Integration of Electric Vehicles to Maximize Benefits to the Grid Through the Implementation of PowerHydrant, an Automated, Bi-directional, Robotic Multi-vehicle Charger Platform	\$921,984	\$0	\$212,666	N/A	Did Not Pass	
Total			\$5,442,061	\$0	\$1,956,472			
Grand Total			\$28,920,812	\$4,499,976	\$6,726,142			